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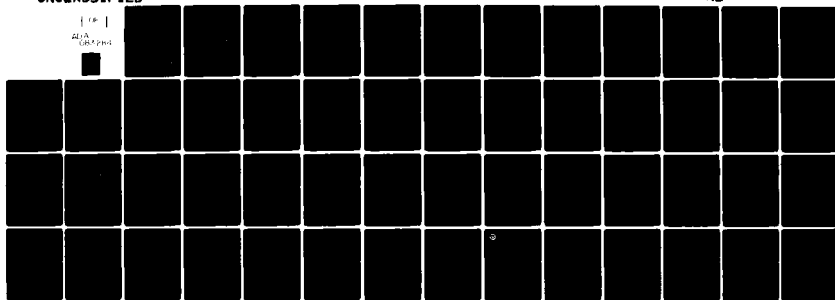
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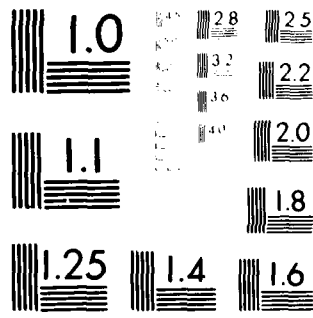
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CULTURAL RESOURCE SURVEY FOR EUCLID CREEK, OHIO

Report for Contract No. DACE 49-79-C-0092

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25 March 1980

Submitted to:

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### ABSTRACT

This report contains the results of a Culture Resource Survey for Euclid Creek Local Flood Control Project, Cuyahoga County, Ohio. Review of the historical literature, manuscript and map sources, and interviews fail to indicate the presence of any known historical sites within the project area. Review of the archaeological literature, records of the Regional Ohio Historic Preservation Office, the site files of the Cleveland Museum of Natural History and Cleveland State University Archaeological Laboratory fail to reveal any known archaeological sites within the project area.

Geological considerations suggest that the area was open for human occupation only after the retreat of the Wisconsin Glacier and the drainage of the Lake Erie basin to the Algonquin Stage sometime after 6200 years B.C. Ecological considerations would suggest that the area was suitable for human occupation following 6200 B.C. up until the time of Anglo-European settlement at 1797-8 A.D.

Walk-over surface survey combined with extensive sub-surface test excavations failed to reveal any evidence of either historic or prehistoric cultural resources in the area.

The extent of presently available knowledge indicates that the proposed construction will not endanger or affect any known or suspected cultural resources of either the prehistoric or historic time periods.

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## I. LOCATION OF SERVICES

All archaeological services have been carried out with respect to area specified in Cultural Resource Survey for Euclid Creek Local Flood Control Project, Cuyahoga County, Ohio (NCBED-PB) and indicated on The Corps of Engineers Drawings (a) Euclid Creek, Ohio Section 205 Flood Control Study and (b) Topographic Map, Euclid Creek Local Flood Control Project December 1978. The study area has been outlined in Fig. 1 of this report.

## II. GEOLOGICAL SETTING

The study area is situated within the Lake Plains Section of the Central Lowland Province of North America (Fenneman 1938). The study area is bounded on the north by the high-water shore line of Lake Erie (Elevation 574.5 feet), and is bounded on the east and west by the 590 foot elevation along the walls of the Euclid Creek Valley. The southern boundary is indicated by the base of the North Lakeland Blvd. bridge as it crosses the Euclid Creek Valley.

The valley of Euclid Creek may be divided into two physiographic portions (sections) based upon geomorphological considerations. The upper section (upstream from Euclid Avenue) is a deeply incised stream valley. The stream has cut a valley ranging between 50 and 210 feet deep through the Mississippian Shales and Sandstones of the Allegheny Plateaus Section of the Appalachian Plateaus Province (Thornbury 1965). The lower portion of Euclid Creek valley (extending downstream from Euclid Avenue) may be described as a poorly defined valley cut between 5 and 20 feet into the lacustrine sediments of the Lake Plains. The study area is located entirely within the Lower Portion of the Euclid Creek Valley.

The physiography of the study area is typical of the lower reach of north-flowing streams of the Lake Erie drainage. Since the stream valley is located north of the Lake Escarpment Moraine, the most recent recessional moraine of the Grand River Lobe of the Wisconsin II glaciation, the valley is extremely young, less than 15,000 years old, based upon the Radiocarbon measurements of the preceeding Defiance Moraine (Prufer and Baby 1963:51). The stream has developed upon materials of lacustrine origin, Goldthwait *et. al.* (1961). As a result of these two factors, the lower portion of Euclid Creek valley is characterized by a shallow stream valley (as controlled by the base elevation of Lake Erie) with gradual contours.

It is possible to provide an estimate as the earliest possible human occupation of the project area on the basis of glacial geology. Since the area is north of the Defiance and the Lake Escarpment Moraines, the area would have been ice covered between 40,000 and 14,100 B.P. Three beach

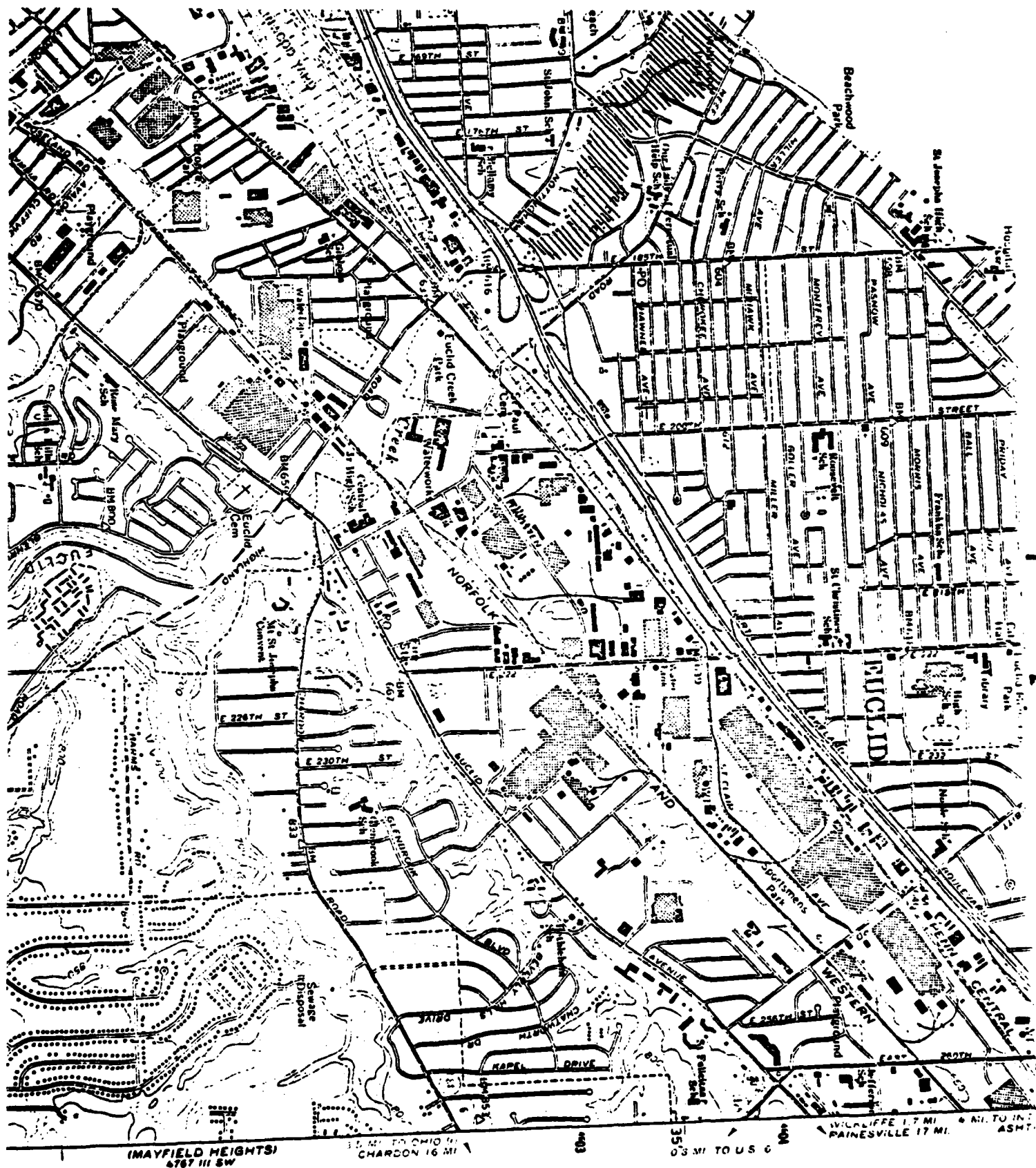


Figure 1. Location of Project Area. U.S.G.S. East Cleveland Quadrangle.

//// = project area.

ridges of predecessor stages of Lake Erie are locally present and provide additional geochronological evidence. Lake Whittlesey (735 feet) has been dated to 12,800 $\pm$  250 years B.P. (Y240). Lake Warren III (675 feet) has been dated to 9,640 $\pm$  250 years (W-199).

The study area would have been submerged by glacial melt starting with the retreat of the ice north of the Lake Escarpment Moraine. This would have continued through Lakes Whittlesey (735 feet), Warren I (690 feet) and Warren II (680 feet). The study area would have been briefly inhabitable during the Two Creek Low Water Stage (573 feet and lower) which has been dated to between 11,600 and 11,200 years B.P. (Wayne and Zumberg 1965). The area would have again been submerged as water rose from the Two Creeks level to the subsequent Lake Warren III level (675 feet ca. 9640 years B.P.). The project area re-emerged from the waters of the glacial lakes sometime after 8,200 $\pm$  480 years B.P. (C-674) as the later waters receded from the Algonquin level of early Lake Erie as the result of the opening of the St. Lawrence drainage. In spite of the possibility of human habitation during the Two Creek interval, the earliest probable date for human habitation of Euclid Creek was after the drop of the lake level below Algonquin level, subsequent to 8200 B.P. or 6,200 $\pm$  480 years B.C.

The parent material for soils in the project area are lacustrine sands, gravels, and clays deposited along the shore lines, and lake bottoms of the glacial lakes in the Erie basin. Goldthwait *et. al.* (1961) reports that these deposits may be as much as 50 meters thick and are frequently underlain by glacial gravels of tills. Test excavations within the study area revealed the existence of interbedded sands, gravels, and clays extending to depths of 2 meters below the present surface of the flood plain. All excavations were terminated at or above the two meter depth because of the intrusion of large quantities of ground water into the excavation units.

### III. ECOLOGICAL SETTING

The project area is situated within the Greater Cleveland Standard Metropolitan Statistical Area. Examination of the aerial photographs and site visits clearly indicate the vast extent of modern human modification of the environment. All vegetation in the area is of recent origin, no trees being older than 50-75 years. Throughout the residential areas, grass and concrete dominate the landscape.

The flood plain of Euclid Creek contains no contemporary dwellings and the vegetation is well developed. In the portion of the flood plain down stream from Lake Shore Blvd., the forest cover is typified by Silver, Maple, Beech, Sycamore, White Oak and Pine Oak, typical of the Mixed Mesophytic Forest. In the areas closest to the creek, and subjected to frequent flooding grasses and shrubs form the dominant cover. The evidence of frequent flooding is composed of partially buried tires, bed springs, plastic milk cartons, and other items of recent garbage.

Studies of the past environments of the project area have not been found in the literature. Gordon (1966, 1967) has reconstructed the vegetation of the State of Ohio at the time of first settlement on the basis of the early land survey reports. Gordon (1966) indicates that the dominant vegetation in the lower portion of the Euclid Creek was Mixed Mesophytic Forest and that the vegetation of the Upper portion of Euclid Creek was dominated by Beech-Maple Forests. This distributional pattern is evident today in spite of the modern human activity.

Any other consideration of past environments in the study area must be based upon inferences drawn from reports for adjacent areas. This information will be introduced where relevant in the outline of the Archaeological Background (Section V) of this report.

#### IV. HISTORICAL BACKGROUND

The original settlement of Euclid Creek was a result of the expedition led by General Moses Cleveland to survey and settle the "New Capital of Connecticut" which is now known as Cleveland. As a result of a series of disagreements among Cleveland's party of 66 surveyors and rod-men, the township of Euclid was separated from Cleveland Township during late June, 1796. Voorhees (1972:1-3) reported that the original boundaries of the township were vague and based upon landmarks. However, the first available map of Euclid township, filed as a portion of the Articles of Incorporation in 1809, clearly indicate that the project area was located within the township, although near the eastern boundary.

The first settlement adjacent to the project area occurred in 1797 when Seth Pease and David Dille both constructed dwellings approximately 250 meters east of the project area (Property Map Euclid Township, Ohio 1851). Neither of these structures exists today.

It was hoped that historic cultural resources would be encountered within the project area as a result of the early settlement date and the size of the early settlements. However, analysis of the following sources failed to indicate the presence of any historic resources within the area:

1. Voorhees (1972) Euclid Ohio 1797-1947 A Record of the Birth and Growth of an Industrial Community (Euclid, Ohio)
2. Anon. (1903) The Proceedings of the Euclid, Ohio Township Trustees from 1797-1903 (Euclid, Ohio copies on file Euclid Historical Society)
3. Howe (1897) Howe's Historical Collections Vol. 1 and 2 (Cleveland, Ohio)
4. Interviews with Mrs. I. DeVoe, President of the Euclid Historical Society and 17 members of the society carried out November 20, 1979 at the Euclid Historical Society.

5. Review of Manuscript and Maps on file at the Euclid Historical Society, Euclid, Ohio.
6. Review of Books, Manuscripts, and Maps of the Western Reserve Historical Society, Cleveland, Ohio.
7. Review of reference library of the Ohio Historical Society Archives, Columbus.

It may be noted in this review that field investigations failed to reveal evidence of any historic cultural resources within the project area. Three mills are reported on the 1851 map of Euclid Township, Ohio, however, all three were located in the upper portion of the Creek valley (probably as a result of the steeper gradient and greater hydrostatic head).

On the basis of analysis of published and manuscript sources, interviews, and examination of the National Register of Historic Places, it may be concluded that no significant historic cultural resources exist within the project area.

#### V. ARCHAEOLOGICAL BACKGROUND

The archaeological background for the project area has been poorly documented. Review of the literature fails to indicate published reports of any archaeological sites within the project area. Further, the literature indicates a paucity of sites along the Lake Plains of eastern Cuyahoga and Lake Counties. Since these areas were settled rather early within the historic period and farmed for over 150 years, one would expect sites to have been discovered if they existed.

Review of the literature and site records in the Regional Ohio Historic Preservation Office indicates the presence of only a small number of sites in this region of North Eastern, Ohio. All sites are situated on or near the edge of the Appalachian Plateau Section in upland settings. This would suggest that the prehistoric inhabitants of the area probably utilized the resources of the ecotone along the edge between the Lake Plains and the Appalachian Plateau sections.

Review of the site files of the Regional Ohio Historic Preservation Office (October 23, 1979) indicates the presence of four reported sites within the Euclid Creek basin. All four sites are situated in the upper portion of the basin and will not be affected by the primary or secondary impact of the Euclid Creek Local Flood Control Project. These sites have been listed below for the sake of completeness, however, the information cited has not been checked by the Principal Investigator for accuracy or completeness:

- a. Clark Site (33Cu-185) 830 feet above Euclid Creek Valley. Artifacts are two Brewerton points of the Laurentian Archaic Tradition. Type of site unknown.

- b. Euclid Creek Reservation Site (33 Cu-75) 800 feet on terrace of small ephemeral stream flowing into Euclid Creek. Grit Tempered Pottery and Triangular projectile points suggest a Late Woodland cultural placement although the type of site is unknown.
- c. Impressive Site (33-Cu-186) 830+ feet on bluff top within Euclid Creek Reservation. Artifacts recovered are characteristic of Brewerton Phase of the Laurentian Archaic. Type of site is unknown.
- d. Shebanek Site (33 Cu-187) 870 feet above Euclid Creek. Site has been destroyed through the construction of a housing development.

As a result of the paucity of sites within the Euclid Creek locality, the following review of the Archaeological Background has been written on the basis of our knowledge of the Northeastern Ohio region.

The earliest known human occupation of the region are evidenced by the Fluted Point Complex of the Palaeo-Indian Tradition which has been dated to between 18,000 and 10,000 B.C. (Prufer and Baby 1963). Within north-eastern Ohio, no sites of this period have been reported in the literature, and the evidence for human occupation has been based upon the recovery of stray artifacts. The geochronology of Northeastern Ohio strongly suggests that evidence of the Fluted Point Complex would occur only south of the Lake Plains themselves. The distributional evidence published by Prufer and Baby (1963: 24-9) clearly supports the suggestion that the Lake Plains were not occupied before 8,000 years B.C. at the earliest.

The succeeding Plano Complex of the Palaeo-Indian Tradition (10,000 to 6,000 years B.C.) has been well evidenced for Northeastern Ohio. Lanceolate projectile points of various styles are the indicator artifact of this stage and they have been recovered throughout northeastern Ohio. The distribution of these tools appears to follow the terminal moraines of the Wisconsin II ice and also the beech ridges of the various stages of Lake Erie. Examination of the causes for this distribution appear in the literature (Prufer and Baby 1963 and Blank 1970), although neither explanation appears adequate to cover all situations.

Three Plano Complex sites have been published for Northeastern Ohio: Causeway Island site (33Tr-1), Platt Site (33Tr-17) and Salaway Farm site (33Tr-22) (Blank 1970: 136-197). All of these components are located along the shoreline of Glacial Lake Mosquito in Trumbull County, Ohio, and were occupied by both Palaeo Indian and Early Archaic cultures. All sites were situated along beech ridges of the retreating glacial lake- which was draining into a swamp during the period of occupation. The available evidence strongly suggested that these sites were inhabited only seasonally and for short periods of time by hunting parties which preyed upon the rich animal fauna of the area.

Analysis of other Late Palaeo-Indian sites within Ohio by Blank (1970) suggested that the culture was adapted to the resources of the Bottomland

Hardwood and Elm-Ash Swamp Forests which developed on the flood plain of streams and in abandoned glacial lake beds. This would suggest that the Plano Complex might have utilized the areas between the beech ridges of the Lake Erie basin. Since the study area is located at a very low elevation and was not exposed until after 6,200 years B.C., utilization of the area by Plano Complex cultures would not have been possible.

The Archaic Developmental Stage spanned the time interval from ca. 8,000 B.C. to ca. 1,000 years B.C. for Ohio (Blank 1970: 1-4). This developmental stage is evidenced by several phases of two cultural traditions: The Appalachian Archaic Tradition (ca. 8,000 to 3,500 years B.C.) and the Laurentian Archaic Tradition (3,500 to 1,000 years B.C.). The only extensive study of the Archaic of northeastern Ohio has been Blank's (1970: 136-248) analysis of sites within the Mosquito Creek and Coshocton-Warsaw locality and Prufer and Sofsky's (1965) analysis of the McKibben site.

Four components of the Kirk Phase of the Appalachian Archaic Tradition have been identified (Causeway Island, Platt, Salaway Farm, and McKibben). All four sites appear to have been hunting stations which were visited intermittently over long periods of time. Palaeoecological information strongly associates the occurrence of these sites with Elm-Ash Swamp Forests and Bottomland Hardwood Forests and suggests that deer, bear, turkey, and perhaps woodland caribou were important faunal resources. Evidence concerning the utilization of floral resources for the early Archaic is not available. These components have been cross-dated to between 8,000 and 6200 years B.C. (Blank 1970: Fig. 22). The chronological placement of the Kirk Phase components strongly suggests their absence from the Euclid Creek project area.

The chronological interval from 6,000 to 3,500 years B.C. is poorly known from anywhere in Ohio. Broyles (1971) has reported the occurrence of the Kanawha, Eva, and Gufford phases dating between 6 and 4,000 years B.C. for the Kanawha River Valley of West Virginia. Coe (1964) has reported the Doerchuck and Eva Phase in the Carolina Piedmont during the same time interval. Sites of this time interval are unknown from New York and Michigan. The only evidence for occupation of Northeastern Ohio during this time interval has been the sporadic occurrence of well defined projectile point types (St. Albans A and B, Eva, Kanawah, etc.) either as isolated surface occurrences or from Multi-Component sites.

The Brewerton Phase of the Laurentian Tradition is evidenced by a large series of sites throughout Ohio, New York, Pennsylvania, and Michigan. These sites have been radiocarbon dated to between 2500 and 2000 years B.C. Although a large number of Brewerton components are known, only a small number have been subject to professional investigations (Blank 1970, Fitting 1970, Ritchie 1969). Nearly all excavated sites represent either habitations or hunting camps which are located in close proximity to rivers or other bodies of water. The palaeo-ecological setting of the sites is dominated by Oak-Chestnut and Mixed Oak floral communities - which reflects the importance of nuts within the diet. The Brewerton Phase people displayed an extremely

diffuse pattern of ecological adaptation, utilizing a wide variety of game mammals, birds, fish, shellfish, in addition to a variety of plant foods.

Based upon both ecological and chronological considerations, one would expect the occurrence of Brewerton Phase sites within the Euclid Creek drainage system. The available data on the Clark site and Impressive Site (page 6) indicates the existence of two Brewerton Phase components in the Upper Portion of Euclid Creek. No evidence for the Brewerton Phase has been found for the project area.

The subsequent Scioto Tradition represents a departure from the hunting and gathering subsistence of the Archaic. Scioto Tradition represents a series of ecological adaptations in which incipient horticulture came to provide a larger and larger portion of the diet. The earliest phase of the Scioto Tradition, the Adena Phase, has been intensively studied by Webb and Snow (1945), Webb and Baby (1957) and Dragoo (1963). The Adena Phase has an extensive distribution in the valleys of the Ohio River and its tributaries dating from 1600 to 100 B.C. Several Adena sites are known from north of the Ohio River - Lake Erie Divide. However, sites of this phase are unknown from the Euclid Creek drainage. Blank's (1975 Chpt. 5) analysis of the distribution of Adena Phase in the Scioto Valley drainage indicated that habitation sites appear to be small hamlets situated on high terraces or ridges overlooking stream valleys while the majority of Adena Phase burial mounds occur on high ridgetops at some distance from streams. Adequate explanation for the lack of Adena Phase sites within the Euclid Creek drainage cannot presently be given.

The Hopewellian Phase of the Scioto Tradition (Prufer 1959, 1965; Blank 1975: Chapter 6; Fitting 1970: Chapter 5) has been radiocarbon dated between B.C. 150 years and 650 years A.D. Although the center of the distribution and greatest concentration of this phase occurs within the Scioto and Miami River Valleys of Ohio, the manifestations extends throughout Ohio, Indiana, Illinois, southern peninsula of Michigan, and New York. The occurrence in Pennsylvania is rather poorly documented.

The Hopewellian Phase is characterized by the construction of burial mounds throughout its range and by a rather clearly defined pattern of funeral-ceremonialism including cremation and the placement of large quantities of grave goods with deceased individuals. Burial mounds rarely occur in isolation, more commonly they occur in mound groups associated with various "ceremonial", geometrical earthen structure (earthworks). The greatest concentration of geometrical earthworks and burial mounds occurs within the Scioto Valley of Ohio. Fitting (1970: 128) suggests the occurrence of a "non-Hopewellian Middle Woodland" on the basis of several sites in Michigan. This manifestation is suggested on the basis of materials recovered but unpublished from Mosquito Creek Reservoir (Blank, 1965 field notes and collections at Cleveland State University), however, a thorough analysis of this manifestation has not been undertaken as of the present time. Sites of the Hopewellian Phase have not been recorded adjacent to the project area.

The subsequent portion of the pre-European culture history for Northeastern Ohio is poorly documented in comparison to other regions. South of the Lake Erie- Ohio River divide, the Scioto Tradition displays a series of diverse manifestations between 650 and 1050 years A.D. These manifestations include the Peters Phase in the Hocking Valley, the Chesser Phase in the Lower Scioto Valley, the Cole Complex in the Upper Scioto Valley, and the Licklighter Phase in the Miami Valley (Blank 1975: Chpt. 7). These diverse phases may be described as the reemergence of the socio-cultural adaptations of the Scioto Tradition, following the decline of the Hopewell Interaction Sphere. The settlement pattern appears to be primarily of a dispersed hamlet type (although large village sites exist in the Miami Valley) while ecological adaptation include a broad-based hunting and gathering pattern supplemented by the cultivation of corn and squash.

South of the Lake Erie-Ohio River divide, the Fort Ancient Tradition (also called the Mississippian Tradition) represents the most recent portion of the prehistoric cultural manifestation dating from ca. 950 to 1750 years A.D. (Griffin 1945; Prufer and Shane 1970). In spite of the existence of regional differences throughout southern Ohio in stylistics and ecological adaptations, the settlement pattern of the Mississippian Tradition consists of large nucleated villages, frequently defended by palisades, containing vacant plazas and platform mounds situated upon the flood plain or low terraces of the streams. The subsistence pattern included the intensive cultivation of corn, beans, squash and perhaps other plants supplemented by hunting and gathering of regionally differing food sources (Blank 1975: Chpt. 8).

North of the Lake Erie - Ohio River divide the time interval between 650 A.D. and the time of Anglo-European settlement (ca. 1797-8), a different cultural-historical sequence is evidenced. Marked differences exist between the cultures of the south shore of the Eastern and Western Basins of Lake Erie (Brose 1976). In the Eastern Lake Erie Basin, the late prehistoric sites have been attributed to a poorly defined Whittlesey Focus (Greenman 1935). In spite of the excavation of additional sites of this focus within recent years and the re-excavation of numerous "classic" sites, a theoretical synthesis has not appeared. Nearly all known Whittlesey component sites are located on ridge-tops, overlooking north flowing streams. Several of the sites display evidence of defensive structures. Brose (1976:36) reported the following concerning the ecological adaptation:

Floral and faunal analysis indicated year-round occupations of the site. Economic activities included the collection of spring-spawning fish presumably from Lake Erie. Summer represented local maize-bean-squash agriculture. Molluscs were collected from the river and there is considerable evidence for the intensive hunting of whitetail deer.

Satellite short-term camps for seasonal specialized extractive activities such as fishing, fowling, and hunting have been tentatively identified.

It is possible that the Euclid Creek Reservation Site (33 Cu-75) may be associated with the Whittlesey manifestation on the basis of the sample collection of artifacts at the Cleveland Museum of Natural History. No other sites of this component are known from the Euclid Creek drainage.

In summary, the known cultural-historic sequence for the project area spans nearly 8,000 years; from 6200 years B.C. to Anglo-European settlement ca. 1797-8. Analysis of the literature, records of the regional office of the Ohio Historic Preservation Office, the Cleveland Museum of Natural History, the National Register of Historic Places, and the Western Reserve Historical Society failed to produce evidence of prehistoric cultural resources within the Euclid Creek Project Area.

## VI. FIELD INVESTIGATIONS

Field investigations were initiated November 7, 1978 after receipt of a Letter of Introduction from the Procurement Officer of Buffalo District of Corps of Engineers. The Principal Investigator would like to recommend that Corps of Engineers issue these letters for all projects as a result of their importance in fieldwork. Permission was attained from 87 separate land owners during the course of the survey. Approximately half of the land-owners granted permission freely. The letter of introduction appears to have been an important factor in attaining permission from 43 of the landowners.

Field Investigations were initiated November 7, 1979 and were completed December 17, 1979. Survey conditions ranged from poor (ground totally obscured by vegetation) through fair (ground exposed by recent erosion or garden plots).

The project area was divided into twenty-four transects, 200 yards wide, 12 transects on both the east and west sides of the river. All transect boundaries were surveyed with a K & E Paragon Transit, Surveyor's Chain, and Stadler Rod. Temporary markers were utilized to mark boundaries of each transect. All test excavations were located relative to transect markers by transit measurements (where undergrowth would allow) or by measurements with a Brunton Compass and Tape Measure.

Three types of sub-surface excavation units were utilized as follows:

- a. 1/2 by 1/2 meter and 1 by 1 meter shovel test units excavated in arbitrary 10 centimeter stratigraphic levels. (Note: the high moisture content of the soil precluded the screening of materials from test excavations. Samples were recovered from each unit for flotation in the field, which failed to reveal and cultural materials.)
- b. Soil Corings using a 3 cm. Wards Orchard Corer. All Orchard Core samples were taken to depths of 1 meter unless consolidated gravels were encountered at shallower depths.

## VII. METHODOLOGY OF ANALYSIS

Since no cultural materials were recovered during the course of the survey, no laboratory analysis was required.

All sub-surface excavation units were recorded on standard Cleveland State University Archaeological Laboratory Survey Forms (See Appendix II). All soil colors were recorded with respect to the Munsel Soil Color Chart and all texture determinations have been based upon standard U.S.D.A. field methods.

## VIII. CONCLUSIONS

- a. Review of the historic literature, manuscript and map sources, and interviews has established that no known historic cultural resources exist within the area of primary or secondary impact of the project.
- b. Review of the archaeological literature, the National Register of Historic Sites, the Regional Ohio Historic Preservation Office files, and the site files of the Cleveland Museum of Natural History and Cleveland State University Archaeological Laboratory have failed to indicate the presence of any known archaeological resources within the area of primary or secondary impact of the project.
- c. Field reconnaissance based upon both walk-over survey and extensive sub-surface test excavation have failed to reveal any prehistoric or historic cultural resources within the project area.

On the basis of the above considerations, it may be concluded that no known or expected cultural resources exist within the Euclid Creek Project Area. It should be noted, however, that the presence of extensive areas of recent fill (composed of slag, concrete, gravel, and asphalt) combined with a high water table; did not allow a portion of the test units to reach parent material. Given the nearly constant water level of Lake Erie over the past 8,000 years, it is highly unlikely that any cultural resources would exist below the water table. It is remotely possible that buried cultural resources may exist under recent fill deposits; however, this is considered to be highly unlikely on the basis of the otherwise completely negative survey results. Given these considerations, if any evidence of past human activity (bone, shell, charcoal, or artifacts) are discovered, the Principal Investigator should be notified immediately.

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Thornbury, W.D.

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Warne, W.J. and J.H. Zumberge

- 1965 Pleistocene Geology of Indiana and Michigan. In Quaternary of the United States, edited by H.E. Wright. Princeton University Press.

Webb, W.S. and C.E. Snow

1945 The Adena People. Reports in Anthropology and Archaeology,  
University of Kentucky, Vol. VI.

Webb W.S. and R.S. Baby

1957 The Adena People No. II. Ohio Historical Society, Columbus.

APPENDIX I:

DESCRIPTION OF SUB-SURFACE TEXT EXCAVATIONS

Unit Number	Type	Physiographic Location	Description
1	Shovel	Flood Plain	Sod 0-6 cms. Brown Sandy Silt 6-36 cms. Grey Clay 38-80 cms.
2	Shovel	Terrace	Brown Sandy Loam 0-7 cms. Yellow Brown Mottled Clay 7-70 cms.
3	Shovel	Flood Plain	Sod 0-3 cms. Grey Brown Clay 3-20 cms. Black Clay 20-31 cms. Yellow Brown Mottled Clay 31-75 cms.
4	Shovel	Flood Plain	Sod 0-7 cms. Brown Sandy Loam 7-38 cms. Yellow Brown Silty Clay 38-73 cms.
5	Shovel	Terrace Bank Cut	Sod 0-8 cms. Yellow/Grey Interbedded Sands 8-220 cms. Yellow Brown Grey Mottled Clays 220-602 cms.
6	Shovel	Flood Plain	Sod 0-3 cms. Brown Silty Loam 3-11 cms. (brought in?) Slag (fill) 11-125 cms. Water Table 125 cms.
7	Shovel	Flood Plain	Slag (fill) 0-75 cms. Water Table 75 cms.
8	Shovel	Flood Plain	Brick, Concrete, Asphalt Fill 0-103 cms.
9	Shovel	Flood Plain	Slag and Gravel Fill 0-75 cms.
10	Shovel	Flood Plain	Slag and Gravel Fill 0-110 cms.
11	Shovel	Flood Plain	Slag Fill 0-85 cms.
12	Shovel	Flood Plain	Slag and Brick Fill 0-75 cms.
13	Shovel	Flood Plain	Brown Sandy 0-8 cms. Sand with Shale Fragments 8-13 cms. Yellow Brown Mottled Clays 12-77 cms.

14	Shovel	Flood Plain	Brown Silty Clays 0-70 cms.
15	Shovel	Flood Plain	Slag and Asphalt Fill 0-70 cms.
16	Shovel	Flood Plain	Slag and Asphalt Fill 0-70 cms.
17	Shovel	Flood Plain	Slag, Brick, and Concrete Fill 0-75 cms.
18	Shovel	Flood Plain	Slag Fill 0-75 cms.
19	Shovel	Flood Plain	Slag and Brick Fill 0-80 cms.
20	Shovel	Flood Plain	Slag and Brick Fill 0-60 cms.
21	Shovel	Flood Plain	Brown Silty Clay 0-85 cms.
22	Shovel	Flood Plain	Brown Silty Clay 0-85 cms.
23	Shovel	Flood Plain	Grey-Brown Loam 0-11 cms. Mottled Clay 11-80 cms.
24	Shovel	Flood Plain	Grey Brown Silty Clay 0-83 cms.
25	Shovel	Flood Plain	Interbedded Sands and Silts 0-51 cms. Grey Brown Clay 51-78 cms.
26	Shovel	Flood Plain	Sod 0-4 cms. Grey-Brown Clay 4-80 cms.
27	Shovel	Flood Plain	Sod 0-7 cms. Cinder-Slag Fill 7-81 cms.
28	Shovel	Flood Plain	Grey-Brown Silty Clay 0-48 cms. Black Sandy Loam 48-68 cms.
29	Shovel	Flood Plain	Glass, Cinders, Brick Fill 0-70 cms. Black Sandy Loam 70-85 cms.
30	Shovel	Flood Plain	Slag and Brick Fill to 85 cms.
31	Shovel	Flood Plain	Gravel and Brick Fill 0-103 cms.
32	Shovel	Flood Plain	Grey-Brown Silty Clay 0-107 cms.
33	Shovel	Flood Plain	Brown Sandy Loam 0-45 cms. Slag and Cinders 45-80 cms. Water Table 80 cms.
34	Shovel	Flood Plain	Grey-Brown Silty Clay 0-60 cms. Water Table 60 cms.
35	Shovel	Flood Plain	Yellow Brown Silty Clay 0-60 cms. Water Table 60 cms.

36	Shovel	Terrace	Concrete Block, Cement Fill 0-80 cms.
37	Shovel	Flood Plain	Brown Sandy Loam with Bricks 0-75 cms.
38	Orchard	Terrace	Yellow-Brown Sandy Clay 0-52 cms.
39	Bucket	Flood Plain	Undifferentiated Sand and Gravel 0-52 cms. Bedrock 52 cms.
40	Orchard	Terrace	Yellow-Brown Silty Clay 0-57 cms. Gravel 57-85 cms.
41	Bucket	Flood Plain	Undifferentiated Sands and Gravel 0-70 cms. Bedrock 70 cms.
42	Orchard	Terrace	Cinder-Sandy Loam Fill 0-73 cms.
43	Orchard	Terrace	Yellow-Brown Sandy Silt 0-80 cms.
44	Bucket	Terrace	Brown Silty Loam 0-35 cms. Concrete and Brick Fill 35-103 cms.
45	Orchard	Terrace	Yellow-Brown Sandy Silt 0-25 cms. Concrete and Slag Fill 25-101 cms.
46	Bucket	Flood Plain	Brown Silty Loam 0-40 cms. Yellow-Brown Clay 40-75 cms..
47	Orchard	Terrace	Brown Sandy Silt 0-57 cms. Rock (?) 57 cms.
48	Bucket	Terrace	Brown Silty Loam 0-19 cms. Yellow-Brown Clay 19-100 cms.
49	Orchard	Terrace	Brown Silty Loam 0-10 cms. Yellow-Brown Silty Clay
50	Bucket	Terrace	Grey-Brown Sandy Loam 0-23 cms. Yellow-Brown Clay 23-80 cms.
51	Orchard	Flood Plain	Sod 0-3 cms. Yellow-Red Sand 3-13 cms. Yellow-Brown Sandy Loam 13-88 cms.
52	Bucket	Flood Plain	Brown Sandy Loam 0-33 cms. Cinder Fill 33-80 cms. Bedrock 80 cms.
53	Orchard	Terrace	Yellow-Brown Silty Sand 0-33 cms. Bedrock 33 cms.

54	Bucket	Flood Plain	Brown Sandy Loam 0-40 cms. Yellow-Brown Mottled Clay 40-81 cms.
55	Bucket	Flood Plain	Sod 0-5 cms. Brown Sandy Loam 5-46 cms. Yellow-Grey Mottled Clay 46-85 cms.
56	Bucket & Shovel	Terrace	Yellow-Brown Sand 0-20 cms. Concrete and Asphalt Fill 20-47 cms.
57	Orchard & Shovel	Terrace	Yellow-Brown Sandy Loam 20 cms. Concrete Slag Fill 20-47 cms.
58	Bucket	Flood Plain	Brown Mottled Clay Loam 0-60 cms. Yellow-Brown-Grey Mottled Clay 60-103 cms.
59	Bucket	Flood Plain	Brown Clay Loam 0-22 cms. Brown-Grey Mottled Clay 22-85 cms.
60	Bucket	Flood Plain	Yellow-Brown Sandy Loam 0-19 cms. Yellow-Grey Mottled Clay 19-75 cms.
61	Bucket	Flood Plain	Yellow-Brown Mottled Clay 0-80 cms.
62	Orchard	Flood Plain	Brown Silt 0-12 cms. Yellow sand 12-85 cms.
63	Orchard	Flood Plain	Brown Silty Loam 0-13 cms. Brown Sand 13-100 cms.
64	Bucket	Flood Plain	Brown Sandy Loam 0-27 cms. Yellow-Brown Sandy Loam 27-135 cms.
65	Orchard	Flood Plain	Brown Sandy Silt 0-67 cms.
66	Orchard & Shovel	Flood Plain	Brown Silt Loam 0-27 cms. Brick and Clay Fill 27-70 cms.
67	Orchard	Flood Plain	Brown Sandy Loam 0-15 cms. Yellow-Brown Clay 15-70 cms.
68	Orchard	Flood Plain	Brown Silty Loam 0-75 cms.
69	Orchard	Flood Plain	Brown Silty Loam 0-8 cms. Grey-Brown Mottled Clay 8-57 cms.
70	Bucket	Flood Plain	Brown Sandy Loam 0-28 cms. Yellow-Brown Mottled Clay 28-95 cms.
71	Bucket	Flood Plain	Brown Sandy Loam 0-34 cms. Yellow-Grey Mottled Clay 34-92 cms.

72	Orchard	Flood Plain	Yellow-Brown Sand 0-75 cms.
73	Bucket	Flood Plain	Brown Sandy Loam 0-35 cms. Yellow-Brown Mottled Clay 35-97 cms.
74	Orchard	Terrace	Brown Silty Loam 0-15 cms. Grey Clay 15-80 cms.
75	Bucket	Terrace	Yellow-Grey-Brown Mottled Clay 0-85 cms.
76	Bucket	Flood Plain	Brown Silty Loam 0-10 cms. Grey Clay 10-75 cms.
77	Shovel	Terrace	Gravel 0-55 cms.
78	Orchard	Flood Plain	Grey Clay 5-65 cms.
79	Orchard	Flood Plain	Gravel 0-12 cms. Grey Clay 12-65 cms.
80	Orchard	Flood Plain	Brown Silt Loam 0-20 cms. Grey Clay 20-73 cms.
81	Orchard	Flood Plain	Sod 0-3 cms. Grey Sandy Loam 3-75 cms.
82	Orchard	Flood Plain	Sod 0-6 cms. Gravel and Slag Fill 6-80 cms.
83	Shovel	Flood Plain	Brick, Concrete, Slag Fill 0-100 cms.
84	Bucket	Flood Plain	Brown Silty Loam 0-10 cms. Yellow-Brown Mottled Clay 10-85 cms.
85	Bucket	Flood Plain	Grey-Brown Silty Loam 0-20 cms. Yellow-Grey Mottled Clay 20-83 cms.
86	Bucket	Flood Plain	Undifferentiated Sand and Gravel 0-47 cms. Bedrock 47 cms.
87	Bucket	Flood Plain	Sand 0-35 cms. Bedrock 35 cms.
88	Bucket	Flood Plain	Interbedded Sands and Silts 0-90 cms. Water 90 cms.
89	Bucket & Shovel	Flood Plain	Brown Silty Loam 0-175 cms.
90	Bucket	Flood Plain	Sod 0-6 cms. Yellow-Brown Mottled Clay 6-84 cms.
91	Bucket	Flood Plain	Brown Sand 0-25 cms. Yellow-Brown Mottled Clay 25-81 cms.

92	Bucket	Flood Plain	Sod 0-6 cms. Yellow-Brown-Grey Mottled Clay 6-75 cms.
93	Bucket	Flood Plain	Brown Sandy Loam 0-75 cms. Yellow-Brown Mottled Clay 75-130 cms.
94	Bucket	Flood Plain	Dark Grey Silt 0-25 cms. Yellow-Brown Mottled Clay 25-83 cms.
95	Shovel	Terrace	Sod 0-6 cms. Grey Brown Silty Loam 6-37 cms. Yellow-Brown-Grey Mottled Clay 37-75 cms.
96	Shovel	Flood Plain	Yellow-Brown Silty Loam 0-78 cms. Water Table 75 cms.
97	Shovel	Flood Plain	Concrete Block and Slag Fill 0-75 cms.
98	Shovel	Flood Plain	Brown Silty Clay 0-60 cms. Water Table 60 cms.
99	Shovel	Flood Plain	Brown Silty Loam 0-57 cms. Water Table 54 cms.
100	Shovel	Flood Plain	Yellow-Brown Sandy Loam 0-37 cms. Water Table 35 cms.
101	Shovel	Flood Plain	Yellow-Brown Interbedded Sands 0-60 cms. Water Table 53 cms.
102	Shovel	Flood Plain	Yellow Grey Mottled Clay 0-61 cms. Water Table 61 cms.
103	Bucket	Flood Plain	Interbedded Yellow-Brown Sand and Silt 0-45 cms. Water Table 45 cms.
104	Bucket	Flood Plain	Brown Silty Loam 0-30 cms. Water Table 30 cms.
105	Bucket	Flood Plain	Brown Sandy Loam 0-30 cms. Water Table 30 cms.
106	Bucket	Flood Plain	Brown Silty Loam 0-24 cms. Water Table 24 cms.
107	Bucket	Flood Plain	Yellow-Brown-Grey Mottled Clay 0-75 cms. Water Table 75 cms.
108	Bucket	Flood Plain	Brown Sandy Silt 0-10 cms. Yellow Brown Mottled Clays 10-67 cms.

109	Bucket	Flood Plain	Brown Sandy Silt 0-20 cms. Yellow Brown Orange Mottled Clay 20-80 cms.
110	Bucket	Flood Plain	Undifferentiated Dark Brown Silt 0-90 cms. Water Table 87 cms.
111	Bucket	Flood Plain	Undifferentiated Dark Brown Silt 0-70 cms. Water Table 67 cms.
112	Bucket	Flood Plain	Yellow Sand 0-10 cms. Slag Fill 10-75 cms. Water Table 75 cms.
113	Bucket	Flood Plain	Brown Sandy Loam 0-40 cms. Yellow-Brown-Grey Mottled Clays 40-85 cms.
114	Bucket	Flood Plain	Brown Sandy Loam 0-49 cms. Yellow-Brown Grey Mottled Clays 49-95 cms.
115	Bucket	Flood Plain	Undifferentiated Brown Sandy Loam 0-125 cms.
116	Bucket	Flood Plain	Brown Sandy Loam 0-75 cms. Interbeded Yellow Sand and Clay 75-125 cms.
117	Bucket	Flood Plain	Brown Sandy Silt 0-70 cms. Yellow-Brown-Grey Mottled Clays 70-124 cms.
118	Bucket	Flood Plain	Undifferentiated brown Silty Loam 0-140 cms Water Table 140 cms.
119	Bucket	Flood Plain	Undifferentiated Brown Sandy Loam 0-125 cms Water Table 125 cms.
120	Bucket	Flood Plain	Undifferentiated Brown Sandy Loam 0-60 cms. Yellow-Brown-Grey Mottled Clay 60-85 cms.
121	Bucket	Flood Plain	Hardpacked Yellow-Brown Sand 0-80 cms. Water Table 80 cms.
122	Bucket	Flood Plain	Hardpacked Yellow-Brown Sand 0-30 cms. Interbeded Yellow Sand and Brown Silt 30-120 cms.
123	Shovel	Flood Plain	Brown Silty Loam 0-15 cms. Yellow-Brown Mottled Clay 15-75 cms.
124	Shovel	Flood Plain	Brown Sandy Loam 0-12 cms. Yellow Brown Mottled Clay 12-75 cms.
125	Shovel	Flood Plain	Dark Brown Silty Loam 0-45 cms. Brown-Grey Mottled Clay 45-87 cms. Water Table 87 cms.

126	Shovel	Flood Plain	Sod 0-9 cms. Dark Brown Sandy Loam 9-52 cms. Yellow Brown Grey Mottled Clay 52-75 cms.
127	Shovel	Flood Plain	Dark Brown Grey Sandy Loam 0-85 cms. Yellow Brown Mottled Clay 85-125 cms. Water Table 125 cms.
128	Shovel	Flood Plain	Interbedded Yellow Brown Sandy Loam 0-104 cm. Water Table 104 cms.

Note: It is strongly suspected that the Yellow-Brown-Grey Mottled Clay reported at the base of many test units represents Hiram Till, the ground moraine remnants of the retreating Grand River Lobe of the Wisconsin II Glacier. Since a field geologist was not available for consultation, this could not be confirmed.

APPENDIX II:

SAMPLE OF FIELD FORMS FOR TEST UNITS

CLEVELAND STATE UNIVERSITY ARCHAEOLOGICAL LABORATORY

EUCLID CREEK SURVEY

TRANSECT TU 95

DISPERSION \_\_\_\_\_

SAMPLE NONE

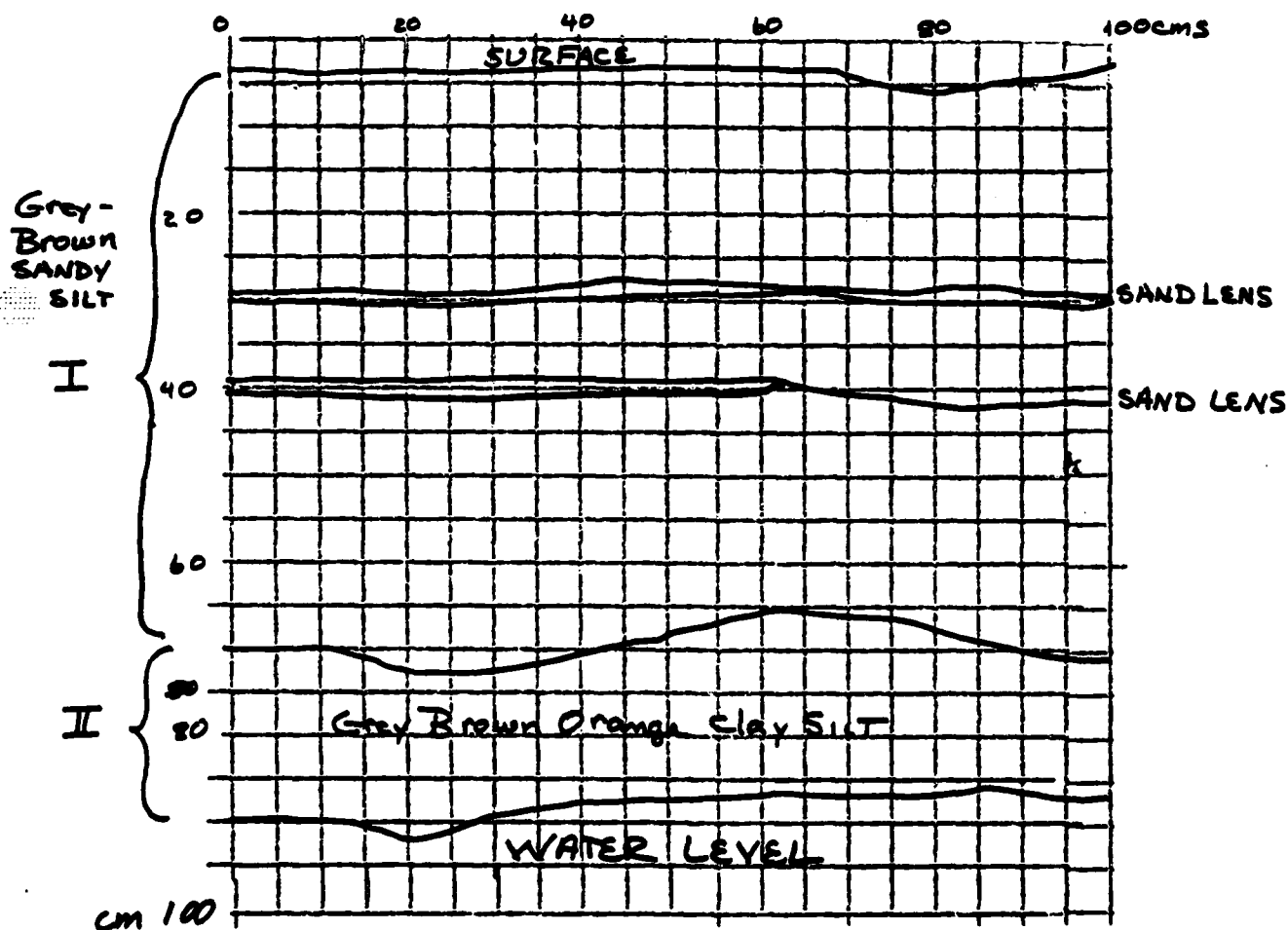
TYPE OF UNIT Shovel

( shovel test, soil core, soil auger, etc. )

LOCATION OF TEST REFERENCE UNIT DESIGNATOR North-West Corner

INVESTIGATOR(S) Judy Astramecki

DATE 11-18-79



Scale 1:5cms

Orientation EAST WALL

CLEVELAND STATE UNIVERSITY ARCHAEOLOGICAL LABORATORY

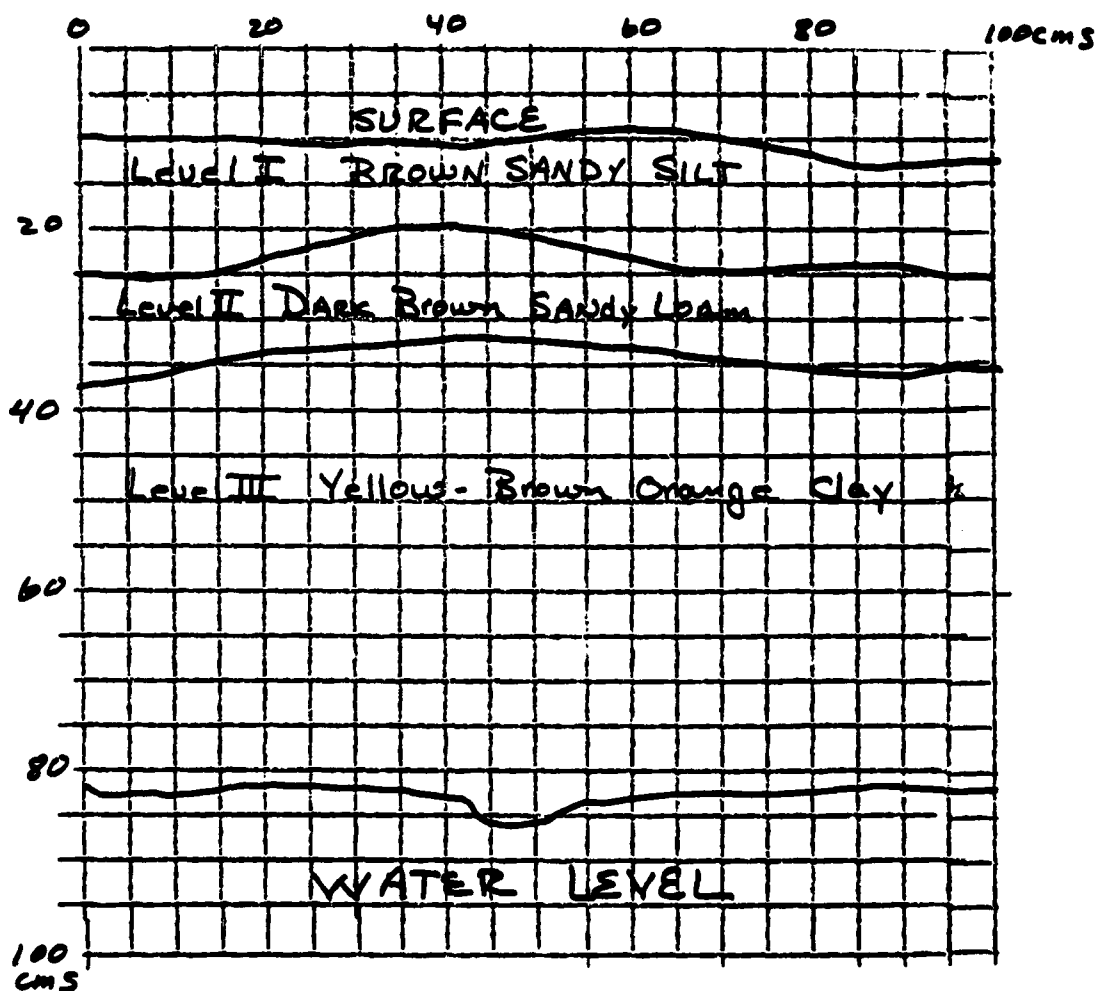
EUCLID CREEK SURVEY

TRANSECT TU 27 DISPERSION \_\_\_\_\_ SAMPLE NONE

TYPE OF UNIT SHOVEL  
( shovel test, soil core, soil auger, etc. )

LOCATION OF TEST REFERENCE UNIT DESIGNATOR N. W. CORNER

INVESTIGATOR(s) Belovich/WALSH DATE 11-18-79



Scale 1:5cms Orientation SOUTH Wall

CLEVELAND STATE UNIVERSITY ARCHAEOLOGICAL LABORATORY

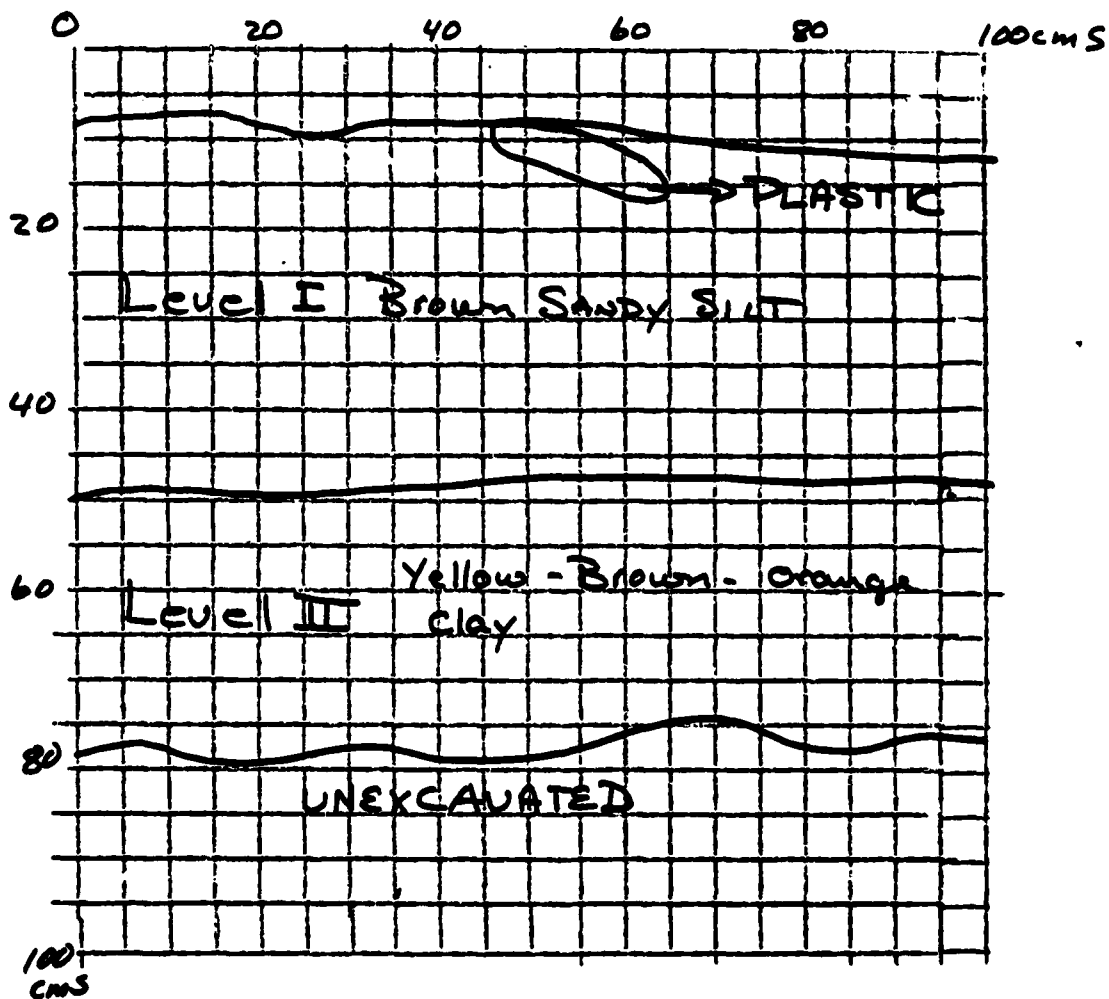
EUCLID CREEK SURVEY

TRANSECT TU 124 DISPERSION \_\_\_\_\_ SAMPLE NO

TYPE OF UNIT SHOVEL TEST  
(shovel test, soil core, soil auger, etc.)

LOCATION OF TEST REFERENCE UNIT DESIGNATOR SOUTH WEST CORNER

INVESTIGATOR(S) BELOVICH / WALSH DATE 11-17-79



Scale 1:5cms

Orientation West Wall

CLEVELAND STATE UNIVERSITY ARCHAEOLOGICAL LABORATORY

EUCLID CREEK SURVEY

TRANSECT TU 125

DISPERSION \_\_\_\_\_

SAMPLE NO

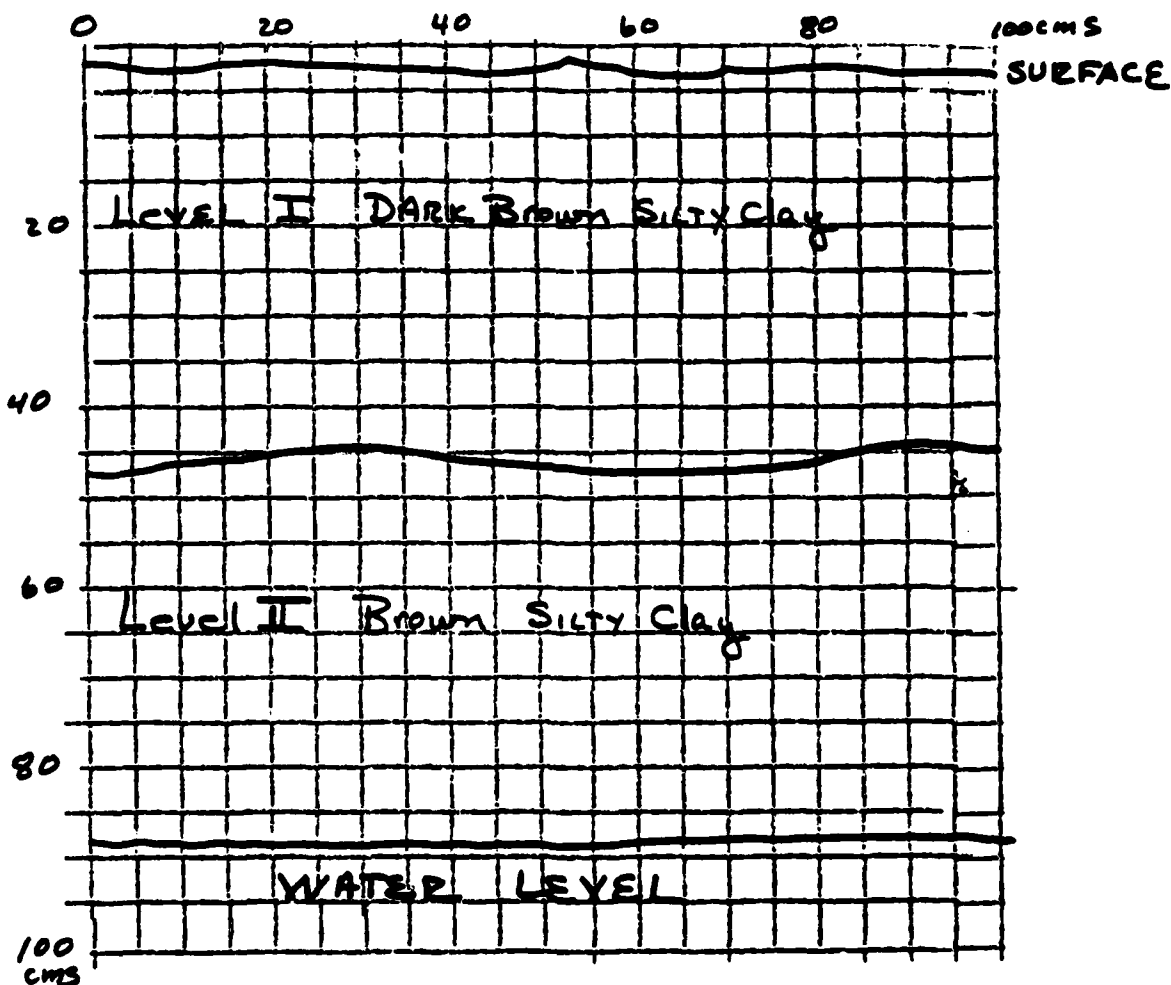
TYPE OF UNIT SHOVEL

( shovel test, soil core, soil auger, etc. )

LOCATION OF TEST REFERENCE UNIT DESIGNATOR N.E. CORNER

INVESTIGATOR(S) ASTRAMECKI / WALSH

DATE 11-18-79



Scale 1:5cms

Orientation SOUTH WALL

APPENDIX III:

CURRICULUM VITAE OF PRINCIPAL INVESTIGATOR

CURRICULUM VITAE

October, 1978

John Edward Blank  
2796 Coleridge Road  
Cleveland Heights, Ohio 44118  
321-9387 (home)  
687-2414 or 2413 (Office)

Born: December 5, 1942  
Married: Mary Griswold  
Children: Joanna Ingrid (Feb. 1969)  
John Charles (Jan. 1969)  
Stephen Lee (Oct. 1970)  
Matthew Edward (Dec. 1971)

Education

University of Massachusetts, Amherst (Ph.D., Anthropology) 1970  
Thesis Topic: The Ohio Archaic: A Study in Culture-Ecological History  
Case Institute of Technology (M.S., Anthropology) 1967  
Case Institute of Technology (B.S., Mathematics) 1964

Professional Society Membership

American Anthropological Association (Fellow)  
American Association of Physical Anthropologists (Member)  
Current Anthropology (Associate)  
Massachusetts Archaeological Society (Member)  
Michigan Archaeological Society (Member)  
New York State Archaeological Society (Member)  
Society for Pennsylvania Archaeology (Member)  
Ohio Academy of Science (Fellow)  
Ohio Archaeological Society (Member)  
Society for American Archaeology (Member)  
Tennessee Archaeological Society (Member)  
West Virginia Archaeological Society (Member)  
Ohio Archaeological Council - Level IV Certification

Teaching Experience

Teaching Assistant, Department of Anthropology, University of Massachusetts, 1967-69  
Field Assistant, Archaeological Field School, University of Massachusetts,  
Summer 1967 and Summer 1968.  
Instructor, Department of Anthropology, University of Massachusetts, Summer 1968  
and Summer 1969  
Assistant Professor, Department of Anthropology, Cleveland State University  
1969-1973  
Associate Professor, Department of Anthropology, Cleveland State University  
1973 to present

Courses Taught/New Courses Developed

An. 111 Evolution of Man and Culture  
An. 201 Ohio Prehistory (developed at CSU)  
An. 202 Elementary Physical Anthropology and Laboratory (developed at CSU)

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John E. Blank  
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Courses Taught/New Courses Developed (cont'd)

- An. 204 Elementary Physical Anthropology and Laboratory (developed at CSU)  
An. 230 Aggression, Territoriality, and Sexuality: Fact and Fiction (developed at CSU)  
An. 234 Women and Men in Anthropological Perspective (developed at CSU)  
An. 240 Anthropological Field School (developed at CSU)  
An. 307 Human Ecology (developed at CSU)  
An. 320 Man and the Primates (developed at CSU)  
An. 321 Peoples and Cultures of Africa (developed at CSU but no longer taught by Blank)  
An. 345 Quantitative Anthropology (developed at CSU)  
An. 401 Special Topics in: Archaeological Photography (developed at CSU)  
Human Osteology (developed at CSU)  
Dental Anthropology (developed at CSU)  
Primate Anatomy (developed at CSU)  
Circum-polar Cultural Ecology (developed at CSU)  
Mesoamerican Ethnology (developed at CSU)  
Anthropological Statistics (developed in cooperation with D.H. McKenzie)  
An. 440 Anthropological Field School (developed at CSU)  
An. 465 Systematics, Taxonomy, Evolution and Darwin (developed at CSU)

Research Experience

Crew Member, Case Institute of Technology, Archaeological Excavation at Scioto Valley, Ohio, Summer 1963-1964.  
Research Assistant, Case Institute of Technology, Archaeological Excavation at the Morrison Site, Chesser Cave Site, and Welling Site, Summer 1965.  
Research Assistant, Case Institute of Technology, Archaeological Excavation at the Blain Site Summer 1966.  
Field Assistant, University of Massachusetts, Archaeological Excavation at the Kramer Site, Summer 1967.  
Field Assistant, University of Massachusetts, Archaeological Excavation at the Libben Site, Summer 1968.  
Field Director, University of Massachusetts, Archaeological Excavation at the Knapp Site, Summer 1969.  
Field Director, Cleveland State University, Archaeological Excavation at the Drake Terrace Site, Summer, 1970.  
Field Director, Cleveland State University, Anthropological Field School at Brown Village and McGraw Garden Sites, Summer 1972.  
Field Director, Cleveland State University, Anthropological Field School at Drake Site and Poe's Run Site, Summer 1973.  
Field Director, Cleveland State University Field School at Eiden Site, Summer 1978.

Publications

The Brown's Bottom Site, Ross County, Ohio. The Ohio Archaeologist (January, 1965), Vol. 15, No. 1, pp. 16-21. Columbus

The McGraw Site, The Ohio Archaeologist (April, 1965), Vol. 15, No. 2, pp. 51-59. Columbus.

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John E. Blank  
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The Honey Run Site (33Co-3): A Late Palaeo-Indian Workshop in Coshocton County, Ohio (with O. Pi-Sunyer and R. Williams). In Studies in Ohio Archaeology, edited by O.H. Prufer and D.H. McKenzie (1967), Western Reserve University Press, Cleveland.

The Plum Run Flint Quarries. With James L. Murphy (Case Western Reserve University) The Ohio Archaeologist, (Spring, 1970), Vol. 20, No. 2, pp. 198-199, 217.

The Archaic Component of the Welling Site (33Co-3), Coshocton County, Ohio The Ohio Archaeologist (Winter, 1970), Vol. 20, No. 4, pp. 269-281.

Review of the Archaeology of Michigan by James E. Fitting. The Ohio Archaeologist, (Fall, 1971), Vol. 21, No. 4.

Archaeological Investigation in the Salt Creek Locality, Ohio: Season 1, The Drake Terrace Site. Report of the investigations to National Park Service, pp. 1-175, 1972.

Elementary Physical Anthropology: A Laboratory Manual. pp. 175 & 76 plates  
Department of Anthropology, Cleveland State University, 1972.

Physical Anthropology, In The Eiden Site: Terminal Late Woodland on the South-Central Lake Erie Shore. Edited by Douglas H. McKenzie and John E. Blank, pp. 80-116. A report prepared at the request of the Board of Commissioners, Lorain County Metropolitan Park District, Elyria, Ohio. (June, 1972)

Review of Burrill Lake and Carrarong: Coastal Sites in Southern New South Wales by R.J. Lampert, Terra Australis, Vol. 1, Australian National University.

Review of Human Osteology: A Laboratory and Field Manual of the Human Skeleton by W.M. Bass, University of Missouri Press, Columbia. Published in Ohio Journal of Science, Vol. 73 No. 4, pp. 222, July, 1973.

Archaeology of the Gallus Site, Koonalda Cave, by R.V.S. Wright, Australian Aborigines Studies, Vol. 26, Australian Institute of Aboriginal Studies, Canberra. Published in American Anthropologist, Vol. 75, No. 4, pp. 1122-1123. August, 1973.

Archaeological and Historical Features. In Environmental Analysis of Central Ohio: Preliminary Report on the Hocking River Basin. Edited by D. Anderson, pp. 76-90. Ohio Biological Survey Publications, 1973.

Archaeological and Historical Features. In Environmental Analysis of Central Ohio. Edited by D. Anderson, pp. 1-265. Ohio Biological Survey Publication, 1974.

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John E. Blank  
page 4

DIFFERENTIAL SUCCESS OF EVALUATION MEASURES IN BIOLOGICAL ANTHROPOLOGY.  
Research Report, Center for Effective Learning, Cleveland State  
University, pp. 14, 1975.

Anthropology Faculty Evaluates Classroom Effectiveness Learning Notes,  
Vol. 4, No. 5, pp. 4-5.

AN ISOLATED HUMAN SKELETON FROM SOUTHERN OHIO, The Ohio Journal of Science  
76(4); 156-63, 1976. With John Lallo

THE ANDERSON VILLAGE SITE, OHIO: A STUDY IN PALAEOANTHROPOLOGY  
Accepted by Papers in Anthropology, University of Massachusetts, 100+ pages.  
1977 publication anticipated. With John Lallo.

ANCIENT DISEASE IN OHIO: THE EIDEN POPULATION, The Ohio Journal of Science,  
77(2) 55-62, 1977. With John Lallo.

Report of Preliminary Reconnaissance Archaeological Survey, Cuyahoga County  
Airport, Ohio. Report submitted to Cuyahoga County Commissioners, 1978.  
pp. 1-12.

Report of Preliminary Archaeological Reconnaissance Survey, Madison County Air-  
port, Ohio. Report submitted to Federal Aviation Agency and KZF Inc. 1978.  
pp. 1-9.

Report of Preliminary Reconnaissance Archaeological Survey, Rock Creek Waste  
Water Treatment, Ashtabula County, Ohio. Report submitted to Environmental  
Protection Agency and Burgess and Niple Ltd. 1978. pp. 1-13.

Report of Preliminary Reconnaissance Archaeological Survey, Madison County  
Airport, Ohio. Report submitted to Federal Aviation Agency and KZF Inc.  
1978. pp. 1-10.

Report of Preliminary Reconnaissance Archaeological Survey, Ottawa National  
Wildlife Refuge, Ohio. Report 14-16-0003-78-51 U.S. Fish and Wildlife  
Service. 1978. pp. 1-14.

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John Blank  
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Publications in Press

Review of Impact of Natural Sciences on Archaeology, edited by T.E. Allibone,  
Oxford University Press. Invited review for American Anthropologist.

Review of The Aborigines and Their Country by C.P. Mountford. Invited  
review for American Anthropologist.

The Role of the Amateur Archaeologist in Site Preservation: A Significant  
Example. Submitted to Ohio Archaeologist, October, 1975. With  
Dr. John Lallo.

Biology Student Evaluation Questionnaire: A New Evaluation Measure  
Submitted to Learning Notes, Center for Effective Learning (Jan. 1976)

ANTHROPOLOGY PEER EVALUATION (A.P.E.): FACULTY EVALUATION OF FACULTY  
Submitted to Learning Notes, Center for Effective Learning, (Jan. 1976)

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Grants Received

- 1969 National Park Service Research Contract No. 14-10-5-950-39  
Archaeological Salvage in Salt Creek Reservoir Area, Ohio - \$4,000
- 1971 Cleveland Foundation Grant No. 1C1293X1.  
Establishment of Learning Module Laboratory in Anthropology  
Total \$6,000
- 1972 Ohio State University Research Foundation (Ohio Biological Survey  
Project No. 3492-A1). Central Ohio Environmental Analysis:  
Archaeology - Historical Features. Total \$3,850.
- 1972 NSF Chautauqua Type Short Course Participant at Syracuse University.  
Topic: Primate Ecology and Behavior.
- 1973 National Park Service Research Contract No. CX-4000-3-0028.  
Archaeological Survey and Excavations, Salt Creek Reservoir,  
Ohio - \$10,000
- 1974 Correlation of Teaching Evaluation in Lower and Upper Division  
Anthropology Courses. Center for Effective Learning, Cleveland  
State University, \$300
- 1975 ANALYSIS OF THE ANTHROPOLOGY EVALUATION PROGRAM, Center for Effective  
Learning, \$300
- 1976 NSF Chautauqua Type Short Course Participant at Miami University.  
Topic: Demography: Theory and Current Methodology.
- 1978 Preliminary Reconnaissance Archaeological Survey, Cuyahoga County Airport  
Cuyahoga County Commissioners \$600.00.
- 1978 Preliminary Reconnaissance Archaeological Survey, Madison County Airport,  
KZF Corporation. \$620.00.
- 1978 Preliminary Reconnaissance Archaeological Survey, Rock Creek Waste  
Water Treatment Facility, Burgess and Niple, Inc. \$650.00.
- 1978 Preliminary Reconnaissance Archaeological Survey, Claremont County  
Airport, KZF Corporation, \$720.00.
- 1978 Preliminary Reconnaissance Archaeological Survey, Ottawa National  
Wildlife Refuge, U.S. Wildlife Service. \$800.00.

Co-participant with Douglas H. McKenzie in the following grant:

- 1971 Title VI of Higher Education Act 1965 for Equipment and Materials to  
Improve Undergraduate Education. Topic area: Physical Anthropology,  
Total \$5,390

APPENDIX IV:

SCOPE OF WORK

NCBED-PB

2 August 1979

CULTURAL RESOURCES SURVEY FOR EUCLID CREEK  
LOCAL FLOOD PROTECTION PROJECT, CUYAHOGA COUNTY, OHIO

APPENDIX "A"

SCOPE OF WORK

1. GENERAL REQUIREMENTS

The purpose of this contract is to provide for cultural resources studies within the environmental impact area of the proposed project as shown on Exhibit I. This action is being taken in accordance with the following legislation: the National Historic Preservation Act of 1966 (P.L. 89-665); the National Environment Policy Act of 1969 (P.L. 91-190); Executive Order 11593, "Protection and Enhancement of the Cultural Environment," 13 May 1971 (36 F.R. 8921); Preservation of Historic and Archeological Data, 1974 (P.L. 93-291); the Advisory Council on Historic Preservation, "Procedures for the Protection of Historic and Cultural Properties" (36 CFR Part 800); National Register of Historic Places, Nominations by States and Federal Agencies, (36 CFR Part 60); National Register of Historic Places, Procedures for Requesting Determinations of Eligibility, (36 CFR Part 63); Recovery of Scientific, Prehistoric, Historic and Archeological Data: Methods, Standards and Reporting Requirements (36 CFR part 66, proposed); and Corps of Engineers, Identification and Administration of Cultural Resources, (33 CFR part 305).

2. This cultural resource survey report will serve several functions. The report will be used as a planning tool which will aid the Corps in meeting its obligations to preserve and protect our cultural heritage. It shall also be a comprehensive, scholarly document that not only fulfills mandated legal requirements but also serves as a scientific reference for future professional studies. As such, the report's content must not only be descriptive but also analytic in nature (proposed rule-making 36 CFR Part 66).

3. The Contractor shall perform this work in a manner which will insure the greatest contribution to the history and prehistory in Ohio.

4. The Contractor shall conduct this work in close cooperation with the State Historic Preservation Officer. Evidence of such cooperation will be documented in the report.

5. The extent and character of the work to be accomplished by the Contractor shall be subject to the general supervision, direction, control, and approval of the Contracting Officer.

## **6. SPECIFIC REQUIREMENTS**

The Contractor shall conduct a cultural resources reconnaissance survey as defined in 33 CFR Part 305.4e. This survey shall include but not be limited to an intensive on-the-ground survey supplemented by shovel testing where necessary; and a literature search and records review in order to locate and assess all cultural resources sites, objects, and buildings within the 100-yard corridor on either side of Euclid Creek in the area identified on Exhibit I.

7. The Contractor shall keep standard field records which may be reviewed by the Contracting Officer. These records shall include but not be limited to field notebooks, site survey forms, field maps, photographs, and stratigraphic profiles.

8. The Contractor shall obtain permission from the appropriate land-owners to enter their property for the purposes of conducting the field survey and testing. The Contracting Officer will provide a letter of introduction to the Contractor to aid in obtaining access to this private property.

9. The field survey shall be closely coordinated with the Contracting Officer. The Contracting Officer reserves the right to have a representative of the Buffalo District present during the field survey.

## **10. REPORT REQUIREMENTS**

The Contractor shall prepare a report detailing the work done, study rationale, survey results, recommendations for additional testing for sites which appear to be potentially eligible for inclusion on the National Register of Historic Places. The report shall include but not be limited to the following sections: an abstract, an introduction, a brief section placing the project area in a regional context, a section on the methodology employed, a brief evaluation of previous work done in the area, an evaluative inventory of cultural resources in the project area, recommendations for testing of sites which appear in general terms to be potentially eligible for inclusion on the National Register of Historic Places, a concise definitive summary, and references. The above terms may not necessarily be discrete units but shall be readily discernible to the reader.

11. The abstract shall be a synopsis of the report where the reader may find the general conclusions and recommendations resulting from the cultural resource reconnaissance survey.

12. The introduction shall include but is not limited to the following: the purpose of the survey, delineation of the study boundaries, and a general statement on the nature of the study conducted.

13. The regional setting including environmental factors affecting the location of cultural resources and the known culture history should be briefly summarized.

14. The methodology used for data collection and analysis shall be described in sufficient detail for a reviewer to understand what was done and why. This shall include but not be limited to a discussion of surveying and sampling procedures, the types of data collected, artifact retrieval procedures, recording techniques, classificatory schemes, methods of chronological determination, and any special analytical methods and techniques used. Maps which show the area surveyed, locations of any test pits, and location of cultural resources recorded shall be included.

15. Typical soil profiles and drawings and/or clear photographs of any anomalies that are discussed in the report shall be included. Examples of standard forms used in recording and/or analyzing data shall be included.

16. There shall be a brief summary of the study findings and recommendations. It should be clear from this exactly what, if any, additional studies are recommended prior to construction of the proposed project. If there are no sites in the project area and no additional work is deemed necessary, a statement to this effect shall be included in the summary.

17. All references cited and/or utilized shall be listed in American Anthropological Association format. Contacts with other individuals shall also be cited.

18. Information shall be presented in textual, tabular, and graphic forms, whichever are most appropriate, effective, and advantageous to communicate necessary information. The Contractor shall give every consideration to the use of nontextual forms of presentation, particularly profile (cross section) drawings in combination with maps, to maximize the quantity and quality of information presented.

19. If the report is authored by someone other than the principal investigator, the principal investigator shall prepare the foreword describing the overall research context of the report, the significance of the work, and any other related background circumstances relating to the manner in which the work was undertaken.

20. The following items shall be included as appendices to the report: the vitae of the principal investigator and any consulting professionals, this Scope of Work, the research design submitted as a result of this procurement action, any letters of comment on the draft report from other agencies forwarded by the Contracting Officer, and the comments on the draft report offered by the Contracting Officer.

21. SUBMITTALS

The Contractor will submit a letter report 30 days after the receipt of Notice to Proceed. This letter report will summarize the results of reconnaissance survey and identify any sites which show potential for inclusion on National Register of Historic Places.

22. The Contractor shall submit six copies of a double-spaced draft report within 60 calendar days after receipt of the Notice to Proceed. The Contracting Officer will provide the Contractor with comments on the draft report within 30 days after receipt of the draft. If for any reason this review period is not sufficient the Contracting Officer shall so notify the Contractor. The Contractor shall submit one original and ten copies, single-spaced, of the final report, including appropriate revisions in response to the Contracting Officer's comments within 15 days of receipt of those comments.

23. Neither the Contractor nor his representatives shall release any sketch, photograph, report, or other material of any nature obtained or prepared under the contract without specific written approval of the Contracting Officer prior to the time of final acceptance of the report by the Government.

24. The Contracting Officer will furnish the Contractor with a copy of the previous cultural resource survey report entitled "The Tonawanda Creek Watershed: A Reconnaissance Level Literature Search and Records Review," prepared by Warren Barbour and Kathleen Miller, the necessary project maps, and a Letter of Introduction.

NCBED-PB

24 July 1979

CULTURAL RESOURCES SURVEY FOR EUCLID CREEK  
LOCAL FLOOD PROTECTION PROJECT, CUYAHOGA COUNTY, OHIO

APPENDIX "B"

SCOPE OF WORK

1. If upon review of the letter report, required by Section 21 of the Scope of Work for the Cultural Resources Survey for Euclid Creek Local Flood Protection Project, it is determined by the Contracting Officer that a Cultural Resources Survey as defined in 33 CFR part 305.4f is desirable, the Contractor shall provide the following items:

a. For any known or newly discovered cultural resource site within the environmental impact area of the proposed project which shows potential for inclusion on the National Register, the Contractor shall implement a testing strategy of sufficient quality and quantity to provide the data necessary to request a determination of eligibility.

b. The Contractor shall prepare a report on these investigations which will provide the information required by 36 CFR part 63 for a determination of eligibility for inclusion on the National Register. The report shall also conform to the specifications outlined in items 10 thru 20 of the Scope of Work, Appendix "A" of this contract.

APPENDIX V:

RESEARCH DESIGN

CLEVELAND STATE UNIVERSITY  
CLEVELAND, OHIO 44115

DEPARTMENT OF ANTHROPOLOGY

August 24, 1979

(216) 687-2414

Ms. Mary E. Socie  
Contract Specialist  
Corps of Engineers, Buffalo District  
1776 Niagra Street  
Buffalo, N.Y. 14207

Dear Ms. Socie:

In response to your request dated 16 August 1979 for a bid for Cultural Resource Survey for Euclid Creek, Ohio, reference your number DACW 49-79-R-0038, we are providing the following:

1. Location of Services: Reference your drawing Euclid Creek, Ohio Section 205 Flood Control Study Scheme 6, Plate 10; the Survey Area to include a 100 yard wide band on the east and west banks of Euclid Creek extending from the mouth to North Lakeland Avenue, a distance of approximately 7,000 feet.

2. Scope of Services:

a. Review of Archaeological Literature: a review of the extant archaeological literature to determine the presence of known and/or suspected archaeological sites within the project area.

b. Review of Historic Literature: a review of the extant literature to determine the presence of known and/or suspected historical sites within the project area. This review will include, but not be limited to the following sources:

1. L. VorHees, 1976, History of Euclid, Ohio;
2. Area and family histories curated by the Euclid Historical Society, Ms. Geraldine DeVoe, President;
3. Area histories and other documents in the archives of the Western Reserve Historical Society, and
4. Area histories and other documents maintained in the archives of the Ohio Historical Society.

c. Historic Preservation Review: review of the records of the Ohio office of Historic Preservation, northeast region to determine the existence of historic and prehistoric sites within the project area either nominated or not nominated for the National Register of Historic Places.

Corps of Engineers, Buffalo District

Page 2

August 24, 1979

d. Field Survey:

1. Interviews will be carried out with members of the Euclid Historical Society and Lake County Chapter of the Ohio Archaeological Society to gain information relative to known or suspected archaeological sites in the project area.
2. Walk-over Survey: Traditional walk-over survey or surface collection will be carried out over the entire project area. A ten (10) meter spacing of traverses will be employed.
3. Test Excavation: Three excavation techniques will be used for sub-surface testing as follows:

- a. 1/2 x 1/2 meter and 1 x 1 meter shovel test units utilizing either arbitrary (10 cm.) or natural stratigraphic units as are applicable,
- b. Soil corings using a 3 cm. wards sampler, and
- c. Soil borings utilizing a 24 cm. soil auger.

A nested-split plot sampling strategy will be utilized for the field analysis. Twenty-four transects (100 yards in width) will be established for the project area, using distance along Euclid Creek from the mouth as reference. Twelve transects will be randomly selected for shovel tests, the remaining 12 transects being initially tested by soil corings and borings. If indications of past cultural activity are provided by any of the three excavation techniques, 1 x 1 meter test units will be employed to evaluate the extent of the cultural remains.

Within all transects, excavation units will be so located as to sample both flood plain and terrace of Euclid Creek, all major soil types, and vegetation zones in the project area. A minimum of ten shovel tests and ten soil corings or borings will be carried out in each transect area.

e. Laboratory Analysis: All laboratory analysis will be carried out in the Archaeological Laboratory at Cleveland State University. All field records and recovered cultural materials will be curated at CSU Archaeological Laboratory, unless other arrangements are made by Corps.

f. Final Report: All report requirements established in NCBED-PB 2 August 1979 shall be met as stated. Further, the final report will conform with the professional standards established by the Ohio Archaeological Council. The principal investigator will serve as author of the report.

In addition to the original and ten copies of the Final Report to be submitted to the contracting office, the following distribution is requested:

- 1.) OHPO- Northeast Region - 1 copy
- 2.) Ohio Archaeological Council Archives - 2 copies
- 3.) CSU Research Office - 1 copy
- 4.) CSU Anthropology Laboratory - 1 copy
- 5.) Principal Investigator - 2 copies

Corps of Engineers, Buffalo District  
Page 3  
August 24, 1979

3. In addition to the materials provided by Corps under part 24 of Scope of Work, Corps will supply the contractor with the following, as available:

1. All available soil information on the project area including soil maps and/or profiles or core logs;
2. Aerial photographs of the project area;
3. Topographic mapping of the project area; and
4. Any or all mutually agreed upon assistance necessary for successful completion of the project.

4. Budget

a. Literary Analysis (Historic and Prehistoric)  
8 hours @ \$4.00 per hour 32.00

b. Archive Analysis:at  
Euclid Historical Society 15 hours  
Western Reserve Historical Society 8 hours  
Ohio Historical Society 8 hours  
@\$4.00 per hour 31 hours 124.00

c. Interviews

16 hours @\$4.00 per hour 64.00

d. Field Survey

Principal Investigator 40 hours @\$12.00 per hour 480.00  
Field Personnel 200 hours @\$4.00 per hour 800.00  
Travel 500 miles @ 24¢ per mile 120.00  
Expendable Supplies 150.00  
Soil Auger Rental 425.00  
1975.00

e. Analysis and Report Preparation

Laboratory Analysis  
PI 6 hours @\$12.00 per hour 72.00  
Student Assistants 30 hours @\$4.00 per hour 120.00

Report Writing  
PI 30 hours @\$12.00 per hour 360.00

Secretarial  
40 hours @\$5.00 per hour 200.00

Printing and Duplicating 200.00  
952.00

Corps of Engineers, Buffalo District  
Page 4  
August 24, 1979

f. Fringe Benefits

\$912 x 20%	182.00
\$1340 x 2%	27.00
	<hr/>
	209.00
	<hr/>
	3,351.00

g. Indirect Costs

Salary and Wages x 20.0%	450.00
\$2252 x 20%	
	<hr/>
	\$3,801.00

Sincerely yours,



John Edward Blank, Ph.D.  
Associate Professor  
Principal Investigator

JEB/lz

enc: Curriculum Vitae

-43-

APPENDIX VI:

DRAFT REPORT COMMENTS



DEPARTMENT OF THE ARMY  
BUFFALO DISTRICT, CORPS OF ENGINEERS  
1776 NIAGARA STREET  
BUFFALO, NEW YORK 14207

Contract No. DACW49-79-C-0092  
NCBED-P

MAR 19 1980

Dr. John Blank  
Cleveland State University  
Department of Anthropology  
Cleveland, OH 44115

Dear Dr. Blank:

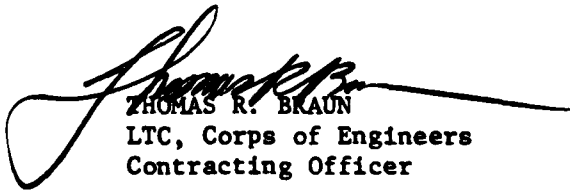
Enclosed are reviews from the Buffalo District, the Ohio State Historic Preservation Office, and the Regional Archaeological Preservation Office regarding the cultural resources reconnaissance survey report written by your firm under the referenced contract. These comments should be considered when you prepare the report for final submittal and included in an appendix to the final report. The Scope of Work for this project should also be included as an appendix.

In accordance with Section 22 of the Scope of Work, "one original and ten copies, single spaced, of the final report, including appropriate revisions in response to the Contracting Officer's comments" shall be submitted within 15 days of the receipt of these comments.

Your cooperation and expeditious response in this matter is appreciated.

Sincerely yours,

3 Incl  
As stated

  
THOMAS R. BRAUN  
LTC, Corps of Engineers  
Contracting Officer

## BUFFALO DISTRICT

Branch/Office NCBED-P Reviewer R.Lewis/E.Gustek Ext. No. 2171

Subject: Cultural Resource Survey Euclid Creek Date 6 Feb. 1980

CMT. NO.	Dwg. or Para. No.	COMMENT
1	Title Page	The correct contract number is DACW-49-79-C-0092
2	Title Page	"Naigra" should be spelled Niagara
3	Abstract	"indivate" should be spelled indicate
4	Page 1 Para 1	(NCBED-PB) should be deleted
5	Page 1 Para 1	"... and indicated on your drawings" should be changed to read ...and indicated on The Corps of Engineers Drawings
6	Page 1 Para 1	"Scheme 5, Plate 10" should be deleted
7	Page 1 Para 2	"corsses" should be spelled crosses
8	Page 2 Para 1	The word beech should be spelled beach. Note: This correction should be made throughout the report.
	Page 2 Para 2	"dates" should be spelled dated
9	Page 3 Para 1	"Goldthwait (et. al. 1961)" should be changed to Goldthwait et.al. (1961)
10	Page 3 Para 2	"and other items of recent garbage" should read "and other items of recent debris."
11	Page 4 Para 3	"As a result of a series of disagreements among Cleveland's part of 66 surveyors and rod-men, the township of Euclid was separated from Cleveland Township during late June 1796". This sentence reads rather awkwardly. Please rephrase it to clarify the meaning. "Artciles" should be spelled Articles

Incl 1

BUFFALO DISTRICT

Branch/Office NCBED-P Reviewer R.Lewis/E.Gustek Ext. No. 2171

Subject: Cultural Resource Survey Euclid Creek Date 6 Feb 1980

CMT. NO.	Dwg. or Para. No.	COMMENT
12	Page 5 Para 3	"ecotome" should be spelled ecotone.
13	Page 6 Para 1	"sited should be spelled cited
	Page 6 Item b	"proiectile" should be spelled projectile
14	Page 6 Para 4	"efidence" is a typographical error and should be spelled evidence.
15	Page 7 Para 2	"Plane" should be spelled Plano
16	Page 7 Para 2	The word "preditated" should be changed to preved.
17	Page 7 Para 3	"agter" is a typographical error and should be spelled after.
18	Page 10 Para 1	"Adene" should be spelled Adena
19	Page 11 Para 2	"mosr" should be spelled most
20	Page 11 Para 2	"villahes" should be spelled villages
21	Page 12 Para 1	"extreetive"?
22	Page 13 Item 6	"orcharc" should be spelled orchard
23	Page 13 Item c	"colsolidates" is this word spelled correctly?
24	Page 13 Para 3	"Plate 10" should be deleted
25	Page 14 Para 1	"picknick should be spelled picnic
	Page 14 Para 3	"Fourty" should be Forty
26	Page 15 Item b	fiald should be spelled failed

Branch/Office NCBED-P Reviewer R. Lewis/E.Gustek Ext. No. 2171

**Subject:** Cultural Resource Survey for Euclid Creek **Date:** 6 Feb 1980

[illegible]

# Ohio Historic Preservation Office

Ohio Historical Center I-71 & 17th Avenue Columbus, Ohio 43211 (614) 466-1500

February 28, 1980

Mr. Richard H. Lewis, Archaeologist  
Buffalo District  
U.S. Army Corps of Engineers  
1776 Niagara Street  
Buffalo, New York 14207

Re: Euclid Creek Local Flood Control Project  
Cuyahoga County, Ohio

Dear Mr. Lewis:

This is in response to a letter from Mr. Donald M. Liddell, Chief of the Engineering Division, received by our office February 11, 1980, requesting comments on the above subject project.

In accordance with the revised guidelines of the Advisory Council on Historic Preservation, the staff of the Ohio Historic Preservation Office has reviewed the Cultural Resource Survey report prepared by Dr. John E. Blank. During the literature search and field reconnaissance, no historic or archaeological resources were located within the proposed project's area of primary or secondary impact. The field investigator feels it is highly unlikely that buried cultural resources will be encountered.

Based upon the documentation provided in the survey report, it is our opinion that the proposed Euclid Creek project will not affect any properties, either historic or archaeological, eligible for, nominated to or listed in the National Register of Historic Places. However, if any cultural materials are encountered during actual project construction, please notify Dr. Blank or the Ohio Historic Preservation Office immediately.

Thank you for the opportunity to review and comment on this project. If you have any questions, please contact the Review and Compliance Department at 614-466-1500, extension 266.

Sincerely,



David L. Brook  
State Historic Preservation Officer

DLB:LS:cw

*Incl. 2*

*1/11/80*

**Regional Office: Cleveland Museum of Natural History  
Wade Oval University Circle Cleveland, Ohio 44106 (216) 231-4600**

March 12, 1980

Mr. Donald M. Liddell  
Chief, Engineering Division  
Department of the Army  
Buffalo District, Corps of Engineers  
1776 Niagara Street  
Buffalo, New York 14207

RE: Cultural Resource Survey for  
Euclid Creek, Ohio  
DACE 49-79-R-0038

Dear Mr. Liddell,

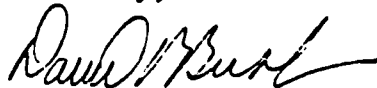
I want to thank you for giving me an opportunity to review the subject report. It allows me to keep a record on both the positive and negative data being generated.

Overall, I found the report to be acceptable. However, I do have two comments to make. For the Geological Setting, I found the description to be lacking fairly recent data which has better defined the classic sequence of glacial lakes. Specifically, the series of glacial lakes has now been condensed into a period of just over one thousand years, as opposed to almost four thousand years. I would recommend reading Jane L. Forsyth's "Late-Glacial and Post Glacial History of Western Lake Erie" in The Compass of Sigma Gamma Epsilon V.51, No. 1, La V, 1973, p. 16-26. In this article these recent discoveries are summarized and other references are cited which better clarify the findings. It is now thought that by 12,000 years B.P., the "outlet at the Niagara escarpment was so low that the drainage must have produced a tremendous flood and left a lake that was almost dry." (Forsyth, 1973; p.20)

My second comment only refers to Appendix II. In the report I received I did not receive Appendix II. This omission is not critical to my review, but is helpful in determining the actual field methodology used.

Once again, thank you for the opportunity to review this report. If I can be of any further help, please feel free to contact me.

Sincerely,



David R. Bush  
Regional Archaeological Preservationist

DRB/cc

**Ohio Historic Preservation Office**

**Ohio Historical Center I-71 & 17th Avenue Columbus, Ohio 43211 (614) 466-8727**